

Appln. Serial No. 10/757,757
Amendment Dated October 17, 2007
Reply to Office Action Mailed July 18, 2007

REMARKS

In the Office Action dated July 18, 2007, claims 12-17, 25, 26, 32, and 33 were rejected under 35 U.S.C. § 102(b) as being anticipated by US 6,212,606 (Dimitroff); and claims 18, 21, 22, 24, 27, and 29-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,212,606 (Dimitroff) and US 2004/0032430A1 (Yung).

Applicant acknowledges the withdrawal of the Restriction Requirement dated April 19, 2007, and the rejoinder of claims 21, 22, and 24.

Independent claim 25 was rejected as being anticipated by Dimitroff. It is respectfully submitted that claim 25 is not anticipated by Dimitroff.

First, it is noted that the Office Action does not adequately identify what constitutes the "interface manager" of claim 25. Claim 25 recites an interface manager that comprises "at least a first port to communicate with controllers operatively associated with storage system devices of the storage system" and "at least one network port to communicate with a host separate from the interface manager and external to the storage system." With respect to each of the "at least a first port" and "at least one network port" clauses of claim 25, the Office Action cited generally to Fig. 1. It is thus unclear what in Fig. 1 is considered by the Office Action as being the interface manager of claim 25 having the at least first port and the at least one network port. Moreover, the Office Action stated that the "at least one control element" of claim 25 is "part of the host." 7/18/2007 Office Action at 4. As explicitly recited in claim 25, the at least one control element is part of the interface manager. This interface manager has the at least one network port to communicate with a host *that is separate from the interface manager* and that is external to the storage system. Thus, the host 106 in Fig. 1 of Dimitroff cannot constitute both the "host" of claim 25 and the at least one control element in the interface manager of claim 25.

Based at least on this improper mapping of elements of claim 25 to elements of Dimitroff, it is respectfully submitted that the anticipation rejection is defective.

Moreover, claim 25 recites that the at least one control element of the interface manager is to receive device information from the controllers, and generate at least one logical map *based on the received device information*. With respect to the "at least one control element" clause of claim 25, the Office Action cited column 2, line 57-column 5, line 67, of Dimitroff. The cited passage of Dimitroff refers to various standardized shared levels that can be used to classify

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various parametrics associated with storage units 118 depicted in Fig. 1. The parametrics include access parametrics, availability parametrics, ownership parametrics, and management parametrics. Note that the parametrics are included in the storage units. As explained in the Summary of the Invention section of Dimitroff, "[e]ach storage unit is coupled to one of the controllers and includes at least one parametric from a group of parametrics used in classifying the shared level of a particular storage unit." Dimitroff, 1:45-48. In other words, Dimitroff clearly states that the parametrics are stored in the storage units to enable classification of the storage units to different standardized shared levels. There is no teaching in Dimitroff of any interface manager to receive device information relating to the storage system devices from the controllers, and generate at least one logical map based on the received device information. In Dimitroff, the parametrics are stored in the storage units (which correspond to the storage system devices of claim 25), to classify the storage units to different standardized shared levels. In other words, even if the host can be considered the interface manager of claim 25, the host does not receive device information relating to the storage system devices from controllers, and generate at least one logical map based on the received device information.

For the foregoing reasons, it is respectfully submitted that claim 25 is not anticipated by Dimitroff.

Independent claim 12 is similarly allowable over Dimitroff.

Moreover, dependent claims of claims 12 and 25 are allowable for at least the same reasons as the corresponding independent claims. Moreover, dependent claim 33, which depends from claim 25, recites that the at least one control element is configured to further monitor for a change in a state of the storage system devices, and in response to the change, modify the at least one logical map.

The rejection of claim 33 was grouped with the rejection of claim 25 in the Office Action. The Office Action did not explain how any element in Dimitroff monitors for a change in a state of the storage system devices, and in response to the change, modify the at least one logical map. In fact, there is no such monitoring and modifying performed by any element of Dimitroff. Therefore, claim 33 is further allowable over Dimitroff for the foregoing reason.

Dependent claim 34, which depends from claim 12, is further allowable for similar reasons as claim 33.

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In view of the allowability of base claims 12 and 25 over Dimitroff, it is respectfully submitted that the obviousness rejection of dependent claims over Dimitroff and Yung has also been overcome.

Independent claim 21 was rejected as being obvious over Dimitroff and Yung. It is respectfully submitted that claim 21 is non-obvious over Dimitroff and Yung.

In the rejection of claim 21, the Office Action stated that Dimitroff discloses the "automated storage system" and "interface manager" elements of claim 21. However, in the rejection of claim 21, the Office Action did not specifically identify where in Dimitroff such elements are found. 7/18/2007 Office Action at 6. Therefore, it is assumed that the Office Action intended that the rejection of claim 25 also applies to claim 21 with respect to the teachings of Dimitroff.

Dimitroff clearly fails to disclose an interface manager separate from the data access devices, transfer robotics, and interface controllers, that is able to generate a logical map of the automated storage system based on aggregating configuration information for the data access drives and transfer robotics. In view of the mis-application of the subject matter of the claims to Dimitroff, it is respectfully submitted that the hypothetical combination of Dimitroff and Yung does not disclose or hint at all elements of claim 21. The obviousness rejection is defective for at least this reason.

Moreover, it is respectfully submitted that no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Dimitroff and Yung. *See KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007). While Dimitroff is related to defining standardized shared levels for different storage units, Yung is related to providing a user interface "for relatively large biological laboratories that have many instruments of different types." Yung, Abstract. Since the teachings of Dimitroff and Yung are directed to very different applications, it is respectfully submitted that a person of ordinary skill in the art would not have been prompted to combine the teachings of Dimitroff and Yung to achieve the claimed invention. The obviousness rejection is therefore further defective for this additional reason.

Dependent claims of claim 21 are allowable for at least the same reason as claim 21.

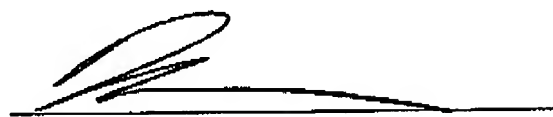
In view of the foregoing, allowance of all claims is respectfully requested.

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The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (200315416-1).

Respectfully submitted,

Date: 10-17-2007



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